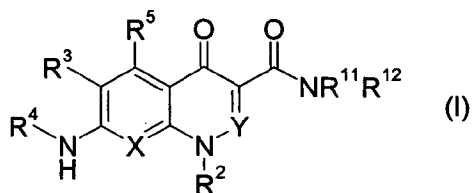


AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A platelet aggregation inhibitor comprising a quinolone derivative represented by the formula (I) or a pharmaceutically acceptable salt thereof as an active ingredient:



[the symbols in the formula have the following meanings:

X: C-R⁷ or N;

Y: C-R⁶ or N;

R¹¹: -H, a lower alkyl which may be substituted, or an amino which may be substituted with a lower alkyl which may be substituted;

R¹²: -H, or a lower alkyl or an aryl which respectively may be substituted, provided that R¹¹ and R¹² together with the adjacent nitrogen may form a cyclic amino which may be substituted;

R²: a lower alkyl or, a cycloalkyl, an aryl or a hetero ring, which respectively may be substituted;

R³: a halogen, a lower alkyl or O-lower alkyl;

R⁴: a cycloalkyl or a non-aromatic hetero ring, which respectively may be substituted, or a lower alkyl substituted with a cycloalkyl; provided that when R⁴ represents a non-aromatic hetero ring which may be substituted, a carbon atom constituting the ring binds to the adjacent NH;

R⁵: -H, a halogen, cyano, nitro, a lower alkyl, a halogeno-lower alkyl, a cycloalkyl, an aryl, a hetero ring, O-lower alkyl, OH, NHCO-lower alkyl, N(lower alkyl)CO-lower alkyl, an amino which may be substituted with a lower alkyl, or a cyclic amino which may be substituted;

R^6 : -H, a halogen, a lower alkyl or a halogeno-lower alkyl;

R^7 : -H, a halogen, a lower alkyl or a halogeno-(lower alkyl);

provided that when Y represents C- R^6 , R^2 and R^6 together may form a lower alkylene or a lower alkenylene.

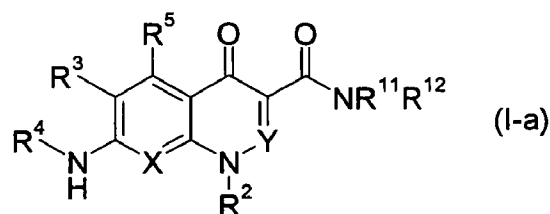
2. (original): A P2Y₁₂ inhibitor comprising the compound according to claim 1 as an active ingredient.

3. (withdrawn): A method for inhibiting platelet aggregation in an individual, comprising administering a therapeutically effective amount of the compound of claim 1, and at least one pharmaceutically acceptable carrier, to the individual.

4. (withdrawn): A method for inhibiting P2Y₁₂ in an individual, comprising administering a therapeutically effective amount of the compound of claim 1, and at least one pharmaceutically acceptable carrier, to the individual.

5 - 6. (canceled).

7. (currently amended): A quinolone derivative represented by the formula (I-a) or a pharmaceutically acceptable salt thereof:



[the symbols in the formula have the following meanings:

X: C- R^7 or N;

Y: C- R^6 or N;

~~R¹¹: -H, a lower alkyl which may be substituted, or an amino which may be substituted with a lower alkyl which may be substituted;~~
~~R¹²: -H, or a lower alkyl or an aryl, which respectively may be substituted, provided that R¹¹ and R¹² together with the adjacent nitrogen may form a cyclic amino which may be substituted;~~
~~R²: a lower alkyl, or a cycloalkyl, an aryl or a hetero ring, which respectively may be substituted;~~
~~R³: a halogen, a lower alkyl or O lower alkyl;~~
~~R⁴: a cycloalkyl or a non-aromatic hetero ring, which respectively may be substituted, or a lower alkyl substituted with a cycloalkyl; provided that wherein R⁴ represents a non-aromatic hetero ring which may be substituted, a carbon atom constituting the ring binds to the adjacent NH;~~
~~R⁵: -H, a halogen, cyano, nitro, a lower alkyl, a halogeno-lower alkyl, a cycloalkyl, an aryl, a hetero ring, O lower alkyl, OH, NHCO lower alkyl, N(lower alkyl)CO lower alkyl, an amino which may be substituted with a lower alkyl, or a cyclic amino which may be substituted;~~
~~R⁶: -H, a halogen, a lower alkyl or a halogeno-lower alkyl;~~
~~R⁷: -H, a halogen, a lower alkyl or a halogeno-(lower alkyl);~~
~~provided that when Y represents C-R⁶, R² and R⁶ together may form a lower alkylene or a lower alkenylene and provided that 7-(cyclohexylamino)-1-ethyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carbohydrazide is excluded.~~

8. (original): The compound according to claim 7, wherein X is CH.

9.-11. (canceled).

12. (currently amended): The compound according to ~~claim 11~~claim 8, wherein R¹² is a lower alkyl substituted with one or more substituent groups selected from Group Q, wherein at least one of the substituent groups is selected from Group P:

Group P: -CO₂H, -SO₃H, -P(O)(OH)₂, and -OP(O)(OH)₂; and

Group Q: -F, -OH, -CO₂H, -SO₃H, -P(O)(OH)₂, and -OP(O)(OH)₂

13. (canceled).

14. (currently amended): The compound according to claim 7, which is
[2-(~~{[7-(cyclohexylamino)-1-cyclopentyl-6-fluoro-4-oxo-1,4-dihydroquinolin-3-yl]carbonyl}~~
~~amino)ethyl]phosphonic acid,~~
(2S)-2-(~~{[7-(cyclohexylamino)-1-cyclopentyl-6-fluoro-4-oxo-1,4-dihydroquinolin-3-~~
~~yl]carbonyl}~~ amino)butanedioic acid,
2-(~~{[7-(cyclohexylamino)-1-cyclopentyl-6-fluoro-4-oxo-1,4-dihydroquinolin-3-~~
~~yl]carbonyl}~~ amino)ethyl dihydrogen phosphate,
(2S)-2-(~~{[7-(cyclohexylamino)-1-cyclopentyl-6-fluoro-4-oxo-1,4-dihydroquinolin-3-~~
~~yl]carbonyl}~~ amino)pentanedioic acid,
~~{2-[(~~{[7-(cyclohexylamino)-6-fluoro-4-oxo-1-[(3S)-tetrahydrofuran-3-yl]-1,4-dihydroquinolin-~~~~
~~3~~
~~yl]carbonyl}amino)ethyl]phosphonic acid,~~
~~{2-[(~~{[7-(cyclohexylamino)-6-fluoro-4-oxo-1-[(3R)-tetrahydrofuran-3-yl]-1,4-dihydroquinolin-3-~~~~
~~yl]carbonyl}amino)ethyl]phosphonic acid,~~
~~[2-(~~{[7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydroquinolin-3-~~~~
~~yl]carbonyl}~~ amino)-1,1-difluoroethyl]phosphonic acid,
~~{2-[(~~{[7-(cyclohexylamino)-6-fluoro-1-[2-hydroxy-1-(hydroxymethyl)ethyl]-4-oxo-~~~~
~~1,4-dihydroquinolin-3-yl]carbonyl}amino)ethyl]phosphonic acid,~~
~~[2-(~~{[7-(cyclohexylamino)-1-ethyl-6-fluoro-4-oxo-1,4-dihydrocinnolin-3-yl]carbonyl}~~~~
~~amino)ethyl]phosphonic acid,~~
~~[2-(~~{[7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydrocinnolin-3-~~~~
~~yl]carbonyl}~~ amino)ethyl]phosphonic acid,
~~[2-(~~{[7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydroquinolin-3-~~~~
~~yl]carbonyl}~~ amino)ethyl]phosphonic acid,
(2S)-2-(~~{[7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydroquinolin-3-~~
~~yl]carbonyl}~~ amino)pentanedioic acid or,
(2S)-2-(~~{[7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydrocinnolin-3-~~
~~yl]carbonyl}~~ amino)pentanedioic acid ~~or~~

[2-({ [7-(cyclohexylamino)-1-(2,2-dimethyl-1,3-dioxan-5-yl)-6-fluoro-4-oxo-1,4-dihydroquinolin-3-yl]carbonyl}amino)ethyl]phosphonic acid, or a pharmaceutically acceptable salt thereof.

15. (currently amended): A pharmaceutical composition comprising a compound according to any one of claims 7, 8, 12 ~~or through~~ 14 and a pharmaceutically acceptable carrier.

16. (original): The pharmaceutical composition according to claim 15, which is a platelet aggregation inhibitor.

17. (original): The pharmaceutical composition according to claim 15, which is a P2Y₁₂ inhibitor.

18. (withdrawn - currently amended): A method for inhibiting platelet aggregation in an individual, comprising administering a therapeutically effective amount of the compound of any one of claims 7, 8, 12 ~~or through~~ 14, and at least one pharmaceutically acceptable carrier, to the individual.

19. (withdrawn - currently amended): A method for inhibiting P2Y₁₂ in an individual, comprising administering a therapeutically effective amount of the compound of any one of claims 7, 8, 12 ~~or through~~ 14, and at least one pharmaceutically acceptable carrier, to the individual.

20 - 21. (canceled).

22. (new): The compound according to claim 7, which is
[2-({ [7-(cyclohexylamino)-1-cyclopentyl-6-fluoro-4-oxo-1,4-dihydroquinolin-3-yl]carbonyl}
amino)ethyl]phosphonic acid,

2-([7-(cyclohexylamino)-1-cyclopentyl-6-fluoro-4-oxo-1,4-dihydroquinolin-3-yl]carbonyl} amino)ethyl dihydrogen phosphate,
[2-([7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydroquinolin-3-yl]carbonyl} amino)-1,1-difluoroethyl]phosphonic acid,
[2-([7-(cyclohexylamino)-1-ethyl-6-fluoro-4-oxo-1,4-dihydrocinnolin-3-yl]carbonyl} amino)ethyl]phosphonic acid,
[2-([7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydrocinnolin-3-yl]carbonyl} amino)ethyl]phosphonic acid, or
[2-([7-(cyclohexylamino)-1-(1-ethylpropyl)-6-fluoro-4-oxo-1,4-dihydroquinolin-3-yl]carbonyl} amino)ethyl]phosphonic acid,
or a pharmaceutically acceptable salt thereof.